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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,663	12/22/2003	Charbel Khawand	CE11141J1210	7605
<div>Larry G. Brown Motorola, Inc. Law Department 8000 West Sunrise Boulevard Fort Lauderdale, FL 33322</div> <div>759007/17/2007</div> <div>EXAMINER VERDI, KIMBLEANN C</div> <div>ART UNIT 2194</div> <div>PAPER NUMBER</div> <div>MAIL DATE 07/17/2007</div> <div>DELIVERY MODE PAPER</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,663	Applicant(s) KHAWAND, CHARBEL	
	Examiner Kacy Verdi	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on June 4, 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :December 23, 2003, June 29, 2007.

DETAILED ACTION

This office action is in response to the Application filed on December 22, 2003. Claims 1, 3-5, and 7-20 are pending in the current application.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 212, 214, 216, 218, 222, of Figure 2 and Figure 20. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in

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upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Please note Brief Summary of Invention is missing from the specification.

Claim Objections

- 3. Claims 12 and 18 are objected to because of the following informalities:
 - a. claim 12, line 2, the recitation of "(e)", should be "(f)";
 - b. claim 18, line 3 and 4, the recitation of "communication path sends a router", should be "communication path"; and
 - c. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent Application 2002/0007410 A1 to Seagren et al. (hereinafter Seagren) in view of United States Patent 6,195,366 B1 to Kayashima et al. (hereinafter Kayashima).

6. As to claim 1, Seagren teaches the invention substantially as claimed including an Interprocessor Communication (IPC) network, comprising:

an IPC server (Distributor for Class A 50, Fig. 4 and Application Server 54a, Fig. 4);

one or more IPC clients coupled to the IPC server (Client 52a, Fig. 4); and

the IPC server includes a port dedication table (paragraph [0039]);

wherein the IPC server includes one or more ports (paragraph [0039]) and the port dedication table keeps track of which of the one or more ports have been dedicated (paragraph [0039]).

does not explicitly teach each of the one or more IPC clients has a port dedication table.

However Kayashima teaches each of the one or more clients has a port dedication table (Port Number Record Table, 214, Fig. 2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the IPC Network of Seagren with the teachings of a Network Communications System from Kayashima because this feature would have provided mechanism of conducting a connectionless communication in a network communication system including a client computer, a server computer, and a plurality of proxy server computers which each computer carries out communication with specification of a communication address and a port number dynamically assigned by the computer (col. 2, lines 40-53 of Kayashima).

7. As to claim 3, Seagren as modified teaches an IPC network as defined in claim 1, wherein the one or more IPC clients also each includes a network routing table that shows what addresses have been assigned to each of the IPC server's ports (Relay Route Table 243, Fig. 2, col. 4, lines 60-67, and col. 5, line 1 of Kayashima).

8. As to claim 4, Seagren teaches an IPC network as defined in claim 3, wherein the IPC server or one of the one or more IPC clients upon receiving a port dedication message (e.g. client request, Fig. 8) from one of the one or more IPC clients that is a peer IPC node informs the IPC client sending the port dedication message if it has a port available for dedication (findBestServer(), step 164 succeeds, paragraph [0050]).

9. As to claim 5, Seagren as modified teaches an IPC network as defined in claim 4, wherein the IPC server or one of the one or more IPC clients that is a peer IPC node also informs the IPC client sending the port dedication message information about the port(s) it has available (notify own proxy server IP address and server side port number to client side connection partner, step 612, Fig. 8 of Kayashima).

10. As to claim 7, Seagren as modified teaches an IPC network as defined in claim 1, wherein each of the port dedication tables found in each of the one or more IPC clients includes information about the IPC client's own port(s) (Fig. 4A, Port Number Area 2141 includes client side port number, col. 5, lines 14-15 of Kayashima).

11. As to claim 8, Seagren as modified teaches an IPC network as defined in claim 1, wherein in the IPC network is found in a radio communication device (e.g. device used in a network communication system in which port numbers can be exchanged in a connectionless communication, col. 2, lines 40-41 of Kayashima) .

12. As to claim 9, Seagren teaches the invention substantially as claimed including a method for dedicating a port in an IPC network having an IPC server and an IPC client, comprising the steps of:

- (a) transmitting a port dedication message from the IPC client to the IPC server (establish connection to server, step 509, Fig. 7);

Seagren does not explicitly teach each having a port dedication table;

- (b) sending an information message back to the IPC client from the IPC server informing the IPC client of which ports the IPC server has available;

- (c) transmitting a message from the IPC client to the IPC server selecting which port it wants to have dedicated); and

- (d) sending a message from the IPC server to the IPC client informing the client that the requested port has been dedicated for its use.

However Kayashima teaches the client having a port dedication table (Port Number Record Table, 214, Fig. 2);

(b) sending an information message back to the IPC client from the IPC server informing the IPC client of which ports the IPC server has available (notify own proxy server IP address and server side port number to client side connection partner, step 612, Fig. 8);

(c) transmitting a message from the IPC client to the IPC server selecting which port it wants to have dedicated (notify communication partner port number to server, step 510, Fig. 7); and

(d) sending a message from the IPC server to the IPC client informing the client that the requested port has been dedicated for its use (relay communication data, step 613, Fig. 8).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the IPC Network of Seagren with the teachings of a Network Communications System from Kayashima because this feature would have provided mechanism of conducting a connectionless communication in a network communication system including a client computer, a server computer, and a plurality of proxy server computers which each computer carries out communication with specification of a communication address and a port number dynamically assigned by the computer (col. 2, lines 40-53 of Kayashima).

13. As to claim 10, Seagren as modified teaches a method as defined in claim 9, wherein in response to step (d) the IPC client updates its port dedication table (step 815, Fig. 11, col. 5, lines 13-20 of Kayashima).

14. As to claim 11, Seagren teaches a method as defined in claim 9, comprising the further step of: (e) sending a message from the IPC server terminating the dedicated port (disconnect message, paragraph [0044]).

15. As to claim 12, Seagren teaches a method as defined in claim 9, comprising the further step of: (e) sending a message from the IPC client requesting that the dedicated port be released (close message, paragraph [0046]).

16. As to claim 13, Seagren teaches a method as defined in claim 10, wherein the IPC server also updates its port dedication table after step (d) (updates current number of clients for Application server, paragraph [0044]).

17. As to claim 14, Seagren teaches a method as defined in claim 9, wherein if after a predetermined period of time a port has not been located that can be dedicated, the port dedication is aborted (place client on waiting list, step 130, Fig. 7, paragraph [0043]).

18. As to claim 15, Seagren as modified teaches a method as defined in claim 9, wherein once the port is dedicated in step (d) data transmitted (e.g. data items, col. 5, line 39 of Kayashima) on the dedicated port is guaranteed a predetermined Quality of Service (QoS) (e.g. real time transfer) regardless of the total data load of other channels on each of the links along the desired data path (real time transfer is suitable for connectionless communications, col. 5, lines 39-41 of Kayashima).

19. As to claim 16, this claim is rejected for the same reasons as claim 8, see the rejection to claim 8 above.

20. As to claim 17, Seagren teaches the invention substantially as claimed including a method for dedicating a port in an IPC network having an IPC server and one or more IPC clients, one of the one or more IPC clients requesting a dedication of a communication path, comprising the steps of:

b) transmitting a peer to peer request from the router layer of the IPC client requesting the communication path dedication to the router layer of the next IPC client or the IPC server in the communication path (establish connection to server, step 509, Fig. 7).

Seagren does not explicitly teach the client having a router and device layer; and

a) transmitting a router channel request from a router layer to a device layer in the IPC client requesting the dedication of the communication path.

However Kayashima teaches the client having a router and device layer (Relay Route Table 243, Fig. 2); and

a) transmitting a router channel request (e.g. assign port number) from a router layer to a device layer (e.g. from client utilizing relay route table, col. 5, lines 21-25) in the IPC client requesting the dedication of the communication path (Client Computer 101, Fig. 1, assigns port number P1 for communication with the Proxy Server 102, Fig. 1, col. 6, lines 49-51).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the IPC Network of Seagren with the teachings of a Network Communications System from Kayashima because this feature would have provided mechanism of conducting a connectionless communication in a network

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communication system including a client computer, a server computer, and a plurality of proxy server computers which each computer carries out communication with specification of a communication address and a port number dynamically assigned by the computer (col. 2, lines 40-53 of Kayashima).

21. As to claim 18, Seagren as modified teaches a method as defined in claim 17, comprising the further step of: c) sending a router channel request from the router layer to the device layer of the next IPC client or IPC server in the communication path (the Proxy Server 102, Fig. 1, assigns port numbers P2 and P3 respectively for communication with the Client Computer 101, Fig. 1, and Proxy Server 103, Fig. 1, col. 6, lines 51-53, IP addresses (communication addresses) to be communicated and recorded in table, col. 6, lines 55-57 of Kayashima).

22. As to claim 19, Seagren teaches a method as defined in claim 18, wherein if the router channel request in step (c) is not replied to in a predetermined period of time, a message is sent to the router of the IPC client requesting the dedication of the communication path to terminate (disconnect from client, step 166, Fig. 8).

23. As to claim 20, Seagren teaches a method as defined in claim 19, wherein the communication path is terminated by the IPC client requesting the dedication of the communication path releasing each channel that was previously reserved up to the point of the timeout instep (c) (close message, paragraph [0046]).

Conclusion


24. The prior art made of record on the accompanying PTO-892 and not relied upon, is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kacy Verdi whose telephone number is (571) 270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 8, 2007
KV


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER